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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,529	07/29/2003	Hardayal Singh Gill	HITG.056PA	6071

7590 10/18/2005

Chambliss, Bahner & Stophel, P.C.  
Two Union Square  
1000 Tallan Building  
Chattanooga, TN 37402

EXAMINER
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WATKO, JULIE ANNE

ART UNIT	PAPER NUMBER
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2653

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/629,529

Applicant(s)

GILL ET AL.

Examiner

Julie Anne Watko

Art Unit

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 1-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09/14/2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. It is noted by the Examiner that claim 26 has been inadvertently omitted from examination thus far. The Examiner apologizes for any inconvenience resulting from this omission.
2. Claims 1-8 are withdrawn from consideration as drawn to a non-elected group. Claims 9-26 are hereby examined on the merits.

### ***Drawings***

3. The drawings were received on September 14, 2005. These drawings are acceptable..

### ***Specification***

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the elected claims are directed. The title refers to a non-elected method.

The following title is suggested: [METHOD AND APPARATUS FOR PROVIDING A] SELF-PINNED BIAS LAYER THAT EXTENDS BEYOND THE ENDS OF THE FREE LAYER.

### ***Claim Rejections - 35 USC § 112***

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
6. Claims 9-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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The terms “increase”, “improving”, “increased”, “large” and “greater”, used throughout the claims, are relative terms which renders the claim indefinite. The terms are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. No reference quantity is provided with respect to which the claimed quantities are increased, improved, etc. Moreover, Applicant has failed to argue that a person of ordinary skill in the art would have understood the metes and bounds of the claims with respect to these limitations.

Applicant is advised to amend the claims or to present arguments regarding these limitations.

***Claim Rejections - 35 USC § 102***

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 25-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Carey et al ‘382 (US PAP No. 2003/0206382 A1).

As recited in claim 25, to the extent understood, Carey et al ‘382 show a self-pinned abutted junction magnetic read sensor, comprising: means 226 for sensing having a first end and a second end defining a width selected to form a desired trackwidth (see Fig. 2); and ferromagnetic means 220 for biasing the means for sensing, the means for biasing the means for sensing extending beyond the ends of the means for sensing (see Fig. 2), the extension of the means for biasing the means for sensing to increase the volume of the means for biasing to improve thermal stability and pinning of the free layer.

As recited in claim 26, to the extent understood, Carey et al '382 show a magnetic storage system, comprising: a moveable magnetic storage means 802 for storing data thereon, an actuator 808 positionable relative to the moveable magnetic storage medium; and a magnetoresistive sensor 806, coupled to the actuator (see Fig. 8), for reading data from the magnetic recording medium when position to a desired location by the actuator, wherein the magnetoresistive sensor further comprises: means 226 for sensing having a first end and a second end defining a width selected to form a desired trackwidth; and means 220 for biasing the means for sensing, the means for biasing the means for sensing extending beyond the ends of the means for sensing (see Fig. 2), the extension of the means for biasing the means for sensing increasing the volume of the means for biasing to provide greater thermal stability and stronger pinning of the free layer.

#### ***Allowable Subject Matter***

9. Claims 9-24 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

10. The following is a statement of reasons for the indication of allowable subject matter: See Applicant's arguments filed September 14, 2005, which are persuasive.

#### ***Conclusion***

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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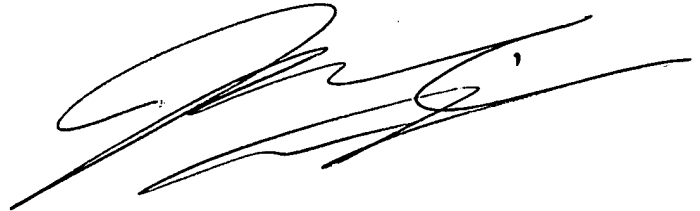
system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Anne Watko whose telephone number is (571) 272-7597. The examiner can normally be reached on Monday-Thursday until 4:45PM, and Friday until 6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Julie Anne Watko  
Primary Examiner  
Art Unit 2653

October 14, 2005  
JAW

A handwritten signature in black ink, appearing to read 'Julie Anne Watko', with a long horizontal flourish extending to the right.